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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,770	10/06/2000	Katsumi Kurematsu	1232-4651	3235

7590 01/17/2002  
Morgan & Finnegan LLP  
345 Park Avenue  
New York, NY 10154

EXAMINER

CRUZ, MAGDA

ART UNIT PAPER NUMBER

2851

DATE MAILED: 01/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/680,770

Applicant(s)

KUREMATSU, KATSUMI

Examiner

Magda Cruz

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: elements 120 and 130. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

***Specification***

5. The abstract of the disclosure is objected to because of a grammar error. On line 12, it reads "and light deflecting element" where it should be - - and a light deflecting element - - . Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claim 1, the phrase "substantially parallel" renders the claim to be indefinite. It is unclear what are the meets and bounds when the applicant utilizes said phrase.
- b. Claims 2-12 falls with parent claim.

as  
1/14/02

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashima, et al. in view of Sato et al.

Nagashima, et al. (US Patent Number 5,408,282) discloses a projection type display apparatus (Figure 7) comprising: a first projection optical system for obliquely projecting light from an original picture onto a predetermined surface (element 30; column 5, lines 38-46), said first projection optical system forming the intermediate image of the original picture on or near said predetermined surface (7); a second projection optical system for obliquely projecting the light from said predetermined surface onto a surface for projection and imaging it thereon (element 30; column 5, lines 38-46); light deflecting means (7) disposed between said first projection optical system and said second projection optical system (said first and second projection optical system is described in Figure 7 with element 30, which is the projection lens of said projection system) for deflecting the light emerging from said first projection optical system; and wherein the optical axis of said first projection optical system is deflected by said light deflecting means to substantially coincide with the optical axis of said second projection optical system (Figure 7); wherein said light deflecting means is disposed on said predetermined surface (column 5, line 43); wherein said surface for projection has an eccentric Fresnel lens (16); wherein said surface for projection has a plurality of eccentric Fresnel lenses (15, 16); wherein said surface for projection has a lenticular lens (17); which is of a rear projection type projecting an image from the rear onto the surface for projection (column 2, lines 6-21).

Nagashima, et al. (US Patent Number 5,408,282) teaches the salient features of the present invention, except a plurality of reflecting mirrors, which are so disposed as to be substantially parallel with the surface for projection.

Sarayeddine (US Patent Number 5,833,339) shows a plurality of reflecting mirrors (column 3, lines 13-15; element 7), which are so disposed as to be substantially parallel with the surface for projection.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the reflecting mirrors disclosed by Sarayeddine in Nagashima's invention for the purpose of making the light beam output by the first means undergo reflections, before directing the beam onto the screen.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashima, et al. in view of Tejima, et al.

Nagashima, et al. (US Patent Number 5,408,282) teaches the salient features of the present invention, except a projection type display apparatus wherein said light deflecting means is a hologram.

Tejima, et al. (US Patent Number 5,442,413) discloses a projection type display apparatus wherein said light deflecting means is a hologram (column 5, lines 55-59).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the deflecting means disclosed by Tejima, et al. in Nagashima's invention for the purpose of deflecting a bundle of rays transmitted through the first projection lens system towards the optical axis of the second projection lens system.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

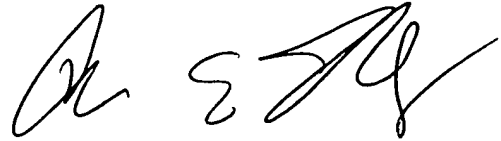
Sato, et al. (US Patent Number 5,048,949) shows a projection type display apparatus (Figure 1) wherein said light deflecting means is constituted by a transmission type diffracting optical element (12); wherein said light deflecting means is constituted by a reflection type diffracting optical element (12); wherein said light deflecting means is disposed at or near the position of said intermediate image (A); wherein said light deflecting means has the light deflecting action and the light condensing action (11); further comprising a plurality of reflecting mirrors which are so disposed as to be substantially parallel with the surface for projection (10, 13, 14).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (703)308-6367. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703)308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-4355 for regular communications and (703)308-5841 for After Final communications.

Art Unit: 2851

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

A handwritten signature in black ink, appearing to read 'Ch E Mahoney', with a stylized flourish at the end.

Christopher E. Mahoney  
Primary Patent Examiner  
Art Unit 2851

Magda Cruz  
Patent Examiner  
January 14, 2002